1. What is the current status of this site?

EPA Response: The EPA became actively involved in the site as a result of a spill that occurred on or August 1, 2014. It is believed that vandals caused a spill when a valve was opened on a storage container (tanker trailer) containing oily waste from the company's tank truck cleaning operations. The spill was spread by heavy rainfall that moved the material through the facility drainage swale on the southwest side of the facility and into the storm drains, streets, and some right-of-way areas on some of the residential properties. The City of Houston and TCEO responded to the spill and began cleanup operations. The cleanup operations involved containment and removal of oily materials, flushing contaminated areas (ditches and right-of-ways) with water and removing such water from ditches, and disposal of the collected materials. The EPA assisted TCEQ by conducting post-cleanup soil sampling within the ditches and residential area right-of-ways, conducting air sampling as a result of the odors emanating from the facility, as well as conducting sampling of the suspected source container(s), and securing the facility by repairing the fencing. The response actions associated with this spill were complete (except for waste disposal) on or about August 8, 2014.

Upon completion of this spill response action, the EPA initiated a removal assessment of the entire facility on August 26, 2014 to begin the process of assessing the storage containers to determine the constituents of the waste and disposal options. The site involved 11 vacuum boxes, 2 roll-off boxes, 12 frac tanks, 2 Tanker Trailers, 23 Aboveground Storage Tanks (ASTs), 20 Waste Water Treatment Tanks, Waste Piles, and numerous totes, vats, drums, and smaller containers. The initial assessment was completed approximately October 2, 2014 although continued assessments were conducted throughout the removal action.

On August 26, 2014, EPA approved an Action Memo with a budget of \$2,000,000 for generally the disposal of waste located on the site. On September 3, 2014, the EPA mobilized its cleanup contractor to begin the cleanup process by initially managing storm water accumulating and flooding the site and began addressing the waste located in the various storage containers focusing initially on those that were leaking and causing the acrid odors throughout the community. The actions completed during the course of the removal action (September 3, 2014 – June 10, 2015) consisted of the following:

<u>Vacuum Boxes (original):</u> Wastes contained in the original 11 vacuum boxes were transferred into shippable vacuum boxes and transported offsite for disposal (Trustee addressed 1 of these vacuum boxes). All original vacuum box containers were removed from the site (Trustee approved their contractor, C4 Environmental, to obtain these boxes for the price of cleaning the boxes and providing them with cleaning certificates).

Roll-off Boxes (original): Wastes contained in the original 2 roll-off boxes were disposed (Trustee addressed 1 roll-off box). All original roll-off boxes were removed from the site (Trustee approved their contractor, C4 Environmental, to obtain these boxes for the price of cleaning the boxes and providing them with cleaning certificates).

Frac Tanks (original): Waste removed from 9 of 12 frac tanks (3 of 12 were originally empty). Eight (8) of the emptied frac tanks that were originally rented by CES Environmental Services during their operations were released back to those rental companies (1 to Dynamic Rental Systems, 7 to Dana Transport). The 4 CES owned frac tanks continued to be used as necessary for cleanup operation and are now empty of contents. One of the frac tanks (FT1004) was sent offsite to be cleaned and deodorized

due to excessive phenol odors resulting from residual sludge attached to the walls and floor of the tank. The remaining CES owned frac tanks were rinsed onsite and still contain residue.

Aboveground Storage Tanks (ASTs): Liquid and sludge were removed from all 20 Steel ASTs and the 3 Poly Tanks. The ASTs have not been hydro-blasted to remove residual contamination on the walls, floors, and ceilings therefore additional cleaning may be necessary for reuse/recycling/disposal. The secondary containments surrounding the tank farms were cleaned of oily materials. The south containment continues to have residual oil seepage from under the tanks. Absorbent boom has been placed around each tank in the south containment to absorb residual oil that may continue to seep from under the south containment tankage. The seepage from under the tanks will continue until the tanks are removed from the site. Additionally, rainfall will continue to accumulate within the secondary containments and will require periodic removal and/or disposal.

Waste Water Treatment Tanks (WWTT): Liquids and sludge were removed from 20 of 20 WWTTs. The WWTTs have not been hydro-blasted to remove residue on the walls, floors, and ceilings therefore additional cleaning may be necessary for reuse/recycling/disposal. The maze of piping in the WWTTs were opened through the valve structure or strategically cut to remove liquids by gravity. The EPA did not flush or otherwise clean the piping. It is expected that the WWTT piping will contain additional solids which did not release when piping was opened or strategically cut. It will likely be necessary for the piping to be removed and cleaned prior to recycling/disposal. Additionally, an open hole in the roof allows rainfall to enter several of the WWTTs and the associated secondary containment and will require continued removal of accumulated liquids.

<u>Totes/Drums/Vats/Misc. Containers:</u> All wastes in totes, drums, and miscellaneous containers were bulked and disposed. The totes and drums were cleaned (pressure washed) and disposed/recycled. Some of the metal totes and metal cages for the totes were left onsite for future recycling.

<u>Removal of Contaminated Sediments/Solids:</u> General cleaning/Excavation of visibly contaminated areas that could potentially cause sheens on storm water was completed to the extent possible.

<u>Loading Bays (Main Operations Building):</u> The loading bays were cleared of debris and cleaned to the extent possible and no longer contain hydrocarbons which could overflow and cause a sheen.

<u>Truck Cleaning Bay:</u> The bays were cleared of debris and cleaned to the extent possible and no longer contain hydrocarbons which could overflow and cause a sheen.

<u>Sumps and Oil/Water Separator:</u> The sumps and oil/water separator located throughout the facility were cleaned and no longer contain hydrocarbons which could overflow and cause a sheen. These sumps will continue to fill up with rainwater and will need to be checked periodically for any accumulation that may need to be removed.

Storm Water Management: Rainfall/Storm water is being allowed to drain from the site. The South storm water outfall is open and has various silt barriers and absorbent and absorbent boom in place to filter the water. The release from this outfall will only occur as height of water in the South Pond reaches the overflow piping. The North storm water outfall is open and has various silt barriers in place to filter the water prior to drainage

into the storm drain. The City of Houston and TCEQ are aware of the EPA's effort to reestablish storm water flow off the site in a filtered and controlled manner as it is not feasible to contain such rainfall on the site.

<u>Waste Piles (Southern Portion of Facility):</u> Trustee removed wastes dumped to the ground surface in March 2014 due to the theft of 7 roll-off boxes. An additional debris pile exists that is associated with the construction of the berm around the southern portion of the facility. The EPA did not address this debris pile.

<u>**Lab Chemicals/Company Profile Samples:**</u> Trustee consolidated and disposed of these chemicals.

Bulk Process Chemicals: Trustee consolidated and disposed of these chemicals.

Disposal Volumes: See attachment

The EPA completed its actions on June 10, 2015. The EPA provided both TCEQ and the PRP Group recommendations for continuing actions believed to be necessary under the TCEQ Voluntary Cleanup Program to complete actions for the site. Those actions included the following:

Transition Activities:

- Designate a contact person that will work with local residents, local officials, and organizations to insure they are kept abreast of activities and can contact you if they have issues or need information (open lines of communication);
- Meet with (b) (6) Air Alliance Houston, Texas Low Income Housing Information Service, Texas Organizing Project, Local Civic Club; Local Officials;

Cleanup Activities (TCEQ and Group will decide on extent of cleanup activities):

- Managing Storm Water (secondary containments, ponded areas on the site)
- ASTs Hydro cleaning for demo/reuse by others (Lonestar Ecology interested in Used Oil Tanks, Fire Department interested 1 Used Oil Tank for Confined Space Entry practice (contact is Steve Dicker HPD):
- WWT Tanks Hydro cleaning for demo/reuse by others (no current interested parties);
- AST/WWTT Piping: Most piping has been cut and liquids drained. Expect some sludge/solids in the piping. These will need to be cut out and addressed.
- Demo Currently Trustee will have its contractor, Stone Machinery, deconstruct the Main Warehouse and Shed Coordination is needed between PRP Group, Trustee, and Stone Machinery (who is going to do what???).
- Sumps All sumps have been cleaned. With all the rain, they are now full of water but have no sheen on them;
- South AST Containment Absorbent boom have been placed around all tanks as oil seeps from under the tanks. The water in this containment as well as the other containments will have to be dealt with periodically.
- On-Site Debris/Trash Removal
- Mercury Containing Bulbs, Oil Filters, light ballasts, etc
- Frac Tank Status FT1004 (off-site cleaned/deodorized); FT1001 (on-site rinse out); FT1002 (on-site rinse out); FT5180 (on-site rinse out)
- Oily Soil Area: The PRP Group is aware of this area. Former Storm Water drainage pathway that flows out the southeast corner of the property (see attached diagram).

Assessment Activities (TCEQ and Group will decide on extent of sampling):

- Off-Site Residential soil sampling to determine need for cleanup actions based upon TCEO criteria:
- Off-Site drainage pathway sampling to determine need for cleanup actions based upon TCEQ criteria;
- Ground water sampling to determine extent of contamination, if any, and what further actions should be taken;
- On-site soil sampling to determine need for cleanup actions based upon TCEQ criteria;
- Periodic storm water sampling (EPA has only done 1 sampling event at this time);
- Other environmental sampling as designated by the TCEQ;

<u>Cleanup Activities dictated by above Assessment Activities (TCEQ and Group will decide):</u>

The PRP Group began actions under the TCEQ VCP on June 10, 2015. Based upon EPA review of monthly reports provided by the PRP Group, it is understood that they have conducted the following:

- Installed/Repaired Security Fencing Around Site
- Conducted Soil Borings/Soil Sampling
- Conducted periodic storm water management with disposal of water;
- Installed on-site groundwater monitoring wells;
- Conducted debris disposal disposed 300 yds trash/vegetation; recycled 9500 lbs of scrap metal; disposed of 0.7 yds of oily soil; disposed of 56 tires; disposed of fluorescent light bulbs; disposed of 24 drums of Investigative Derived Waste; disposed of 3 drums of oily soil;
- Prepared/Submitted Affected Property Assessment Report (March 2016)
- Prepared/Submitted Waste Closure Unit Work Plan (October 2016)

2. Who is in charge?

EPA Response: The TCEQ is in charge of the oversight of the actions being taken by the PRP Group. EPA receives the PRP monthly reports in order to keep up to date on the activities being conducted on the Site. These same reports are provided to the public on a website (www.cesgriggsrd.com).

3. What has been done for remediation since EPA left the site? **EPA Response:** The monthly reports describe the actions being taken on a monthly

basis and are being prepared by the PRP Group and posted on a publicly accessible website at (www.cesgriggsrd.com). The website is intended to be the location where the public can obtain information about the actions being taken on the site. It is also a conduit for public interaction with the PRP Group. Based upon EPA review of monthly reports provided by the PRP Group, it is understood that they have conducted the following:

- Installed/Repaired Security Fencing Around Site
- Conducted Soil Borings/Soil Sampling
- Conducted periodic storm water management with disposal of water;
- Installed on-site groundwater monitoring wells;
- Conducted debris disposal disposed 300 yds trash/vegetation; recycled 9500 lbs of scrap metal; disposed of 0.7 yds of oily soil; disposed of 56 tires;

disposed of fluorescent light bulbs; disposed of 24 drums of Investigative Derived Waste; disposed of 3 drums of oily soil;

- Prepared/Submitted Affected Property Assessment Report (March 2016)
- Prepared/Submitted Waste Closure Unit Work Plan (October 2016)
- 4. What is proposed to be done with this site in the future to further clean-up this site and remove contaminants both on-site and off-site?

EPA Response: The future actions will be dependent on the results of the investigation(s). It is important to realize that the PRP Group does not own the property(s). It is my The CES Environmental Services, Inc. Bankruptcy Trustee remains in control of the property and all assets of CES Environmental Services, Inc. as appointed by the Bankruptcy Court.

TCEQ Response: The site is currently in the site assessment phase. Once the assessment is complete, the VCP Applicant must submit a Response Action Plan (RAP) detailing plans to remediate the site.

5. Why did EPA leave from the site? Did the money run out?

EPA Response: The EPA left the site as it had completed its actions to rid the site of the abandoned chemicals which was the immediate threat to public health and also that an agreement was in place or close to being in place between TCEQ and the PRP Group to conduct a complete assessment and cleanup as determined necessary. The TCEQ with EPA assistance was able obtain PRP involvement in the continuing site actions as both TCEQ and EPA recognized that additional work would be needed. The TCEQ Voluntary Cleanup Program (VCP) appeared to be the most immediate way to get uninterrupted activity and complete the assessment and cleanup. The TCEQ is in charge of overseeing and approving activities under the VCP. EPA has been monitoring the progress but does not have a direct role in the activities being conducted under the VCP.

Additionally, the EPA Removal Program has a statutory limit for cleanup actions at sites which is 12 months and \$ 2 million unless an exemption is obtained. The EPA expended 9 months and \$1,923,030. In addition, the TCEQ expended another \$430,946 for waste disposal. The EPA Removal Program did obtain an exemption to the 12 month and \$ 2 million limitations in May 2015 specifically to insure that time and funding was available to complete the cleanup and disposal of the abandoned chemicals. The budget was increased from \$ 2,000,000 to \$2,700,000 but the additional funding was never placed on the EPA contract.

- a. Did EPA consider this site remediated?
 - **EPA Response:** The EPA has addressed the most significant risk to the community by removing the bulk chemicals located on the property. It was apparent to EPA that additional assessment and data evaluation was needed to insure that both on and off-site areas were within acceptable human health risk ranges. As a result, EPA provided the following recommendations to TCEQ and the PRP Group relative to follow-on activities prior to departing the site on June 10, 2015:
 - Managing Storm Water (secondary containments, ponded areas on the site)
 - ASTs Hydro cleaning for demo/reuse by others (Lonestar Ecology interested in Used Oil Tanks, Fire Department interested 1 Used Oil Tank for Confined Space Entry practice (contact is Steve Dicker HPD);
 - WWT Tanks Hydro cleaning for demo/reuse by others (no current interested parties);
 - AST/WWTT Piping: Most piping has been cut and liquids drained. Expect some sludge/solids in the piping. These will need to be cut out and addressed.

- Demo Currently Trustee will have its contractor, Stone Machinery, deconstruct the Main Warehouse and Shed Coordination is needed between PRP Group, Trustee, and Stone Machinery (who is going to do what???).
- Sumps All sumps have been cleaned. With all the rain, they are now full of water but have no sheen on them;
- South AST Containment Absorbent boom have been placed around all tanks as oil seeps from under the tanks. The water in this containment as well as the other containments will have to be dealt with periodically.
- On-Site Debris/Trash Removal
- Mercury Containing Bulbs, Oil Filters, light ballasts, etc
- Frac Tank Status FT1004 (off-site cleaned/deodorized); FT1001 (on-site rinse out); FT1002 (on-site rinse out); FT5180 (on-site rinse out)
- Oily Soil Area: The PRP Group is aware of this area. Former Storm Water drainage pathway that flows out the southeast corner of the property.
- b. Does EPA have concerns about this site from a toxicological standpoint? **EPA Response:** It is important to understand that all bulk hazardous chemicals have been removed from the site by the EPA and TCEQ with an expenditure of approximately \$2.35 million. This has greatly reduced the EPA's concerns about the site. Obviously, EPA will remain concerned until the on and off-site investigations and evaluations are complete and all containers have been decontaminated and hopefully removed from the site.
 - **TCEQ Toxicology Response:** It is important to understand that all bulk hazardous chemicals have been removed from the site. Remaining contamination is being assessed under the VCP. Off-site soil data to date have not indicated a cause for public health concern.
- c. Why did EPA not make a final report to the community regarding the safety of this site and surrounding areas?
 - **EPA Response:** During the course of the EPA Removal Activities, the EPA gave interviews to local news media, met with and had meeting with Congresswoman Lee and Councilman Boykin, routinely met with Texas Organizing Project, Air Alliance Houston, Texas Low Income Housing Information Service, met individually with residents, and met with groups from the University of Houston Law School and Texas Southern University (Dr. Nance). The EPA also participated in two (2) public meetings for the site. They were held in December 2014 and February 2015. These meetings were well attended and included persons from the local community, TCEQ, Texas Department of State Health Services (TDSHS), City of Houston, Congresswoman Lee's office, Councilman Boykin, McGregor Park Civic Club, and Old Spanish Trail Community Partnership. The EPA also provided updates and participated in impromptu meetings with those that were involved with assisting the community (ie. Texas Organizing Project, Air Alliance Houston, Texas Low Income Housing Information Service, as well as several residents that were specifically interested in the EPA activities). Additionally, the EPA requested the assistance of the TDSHS through the Agency for Toxic Substances and Disease Registry to talk with residents about health concerns. All of these entities were kept informed about EPA activities and were well aware of the EPA plans. The EPA did make a final report to the community through a final written email update to City of Houston, Representative Shelia Jackson Lee's Office, Councilman Dwight Boykin's Office, Texas Organizing Project, Air Alliance Houston, Texas Low Income Housing Information Service, and several interested residents.
- 6. A map and chart attached to this document (see attachments A and B) from the VCP application shows that there are levels of heavy metals on residential property adjacent to this site.

- a. Has there been any further off-site testing beyond that identified in the attached document?
 - **TCEQ Response:** At this time, no further off-site assessment has taken place. The TCEQ requested additional delineation of soil and groundwater in our letter dated June 24, 2016. However, the samples collected to date on the off-site properties do not exceed the Texas Risk Reduction Program (TRRP) residential health based levels.
- b. Did EPA make any assessment of the potential health hazard associated with this off-site contamination?
 - **EPA Response:** The EPA conducted post cleanup sampling related to the August 2014 spill that entered the drainage ditch southwest portion of the facility (Kingsbury and Wayland). Those results were reviewed by EPA Toxicologists and it was determined that there was no concern and that no further action needed to be taken.
- c. If so, was this written up and released to the public?
- d. If not, why not?
 - **EPA Response:** The EPA provided information in fact sheets concerning the spill in August 2014 and also provided information in questions asked by the Texas Organizing Project.
- 7. A map attached to this document (see attachment C) identifies groundwater contamination within the site and a delineated groundwater plume. However, there appears to be only two wells within the plume and no other testing wells near this plume. In the APAR Summary dated March 31, 2016, it is stated that the groundwater contamination does not extend off-site. Would someone explain how the conclusion that there is no off-site groundwater contamination is warranted when there are no "clean" wells to delineate the edge of the plume?
 - **TCEQ Response:** The TCEQ requested additional delineation of the groundwater in a letter dated June 24, 2016.
- 8. Within the TCEQ's VCP, the responsible party is preparing an APAR. According to the APAR Summary document submitted March 31, 2016 to the TCEQ, this APAR is currently being reviewed with the goal of approval by TCEQ.
 - a. What is the purpose of an APAR? TCEQ Response: The purpose of an APAR is to document the affected property assessment of the site which must be performed in accordance with Title 30, Texas Administrative Code, §350.51. An Affected Property Assessment should characterize the nature, degree and extent of chemicals of concern (COCs) in soil, groundwater, and other environmental media.
 - b. What is involved in the approval of an APAR?

 TCEQ VCP Response: The TCEQ reviews the APAR to determine compliance with the TCEQ's rules regarding assessment.
 - c. Has the APAR been approved by the TCEQ?
 TCEQ Response: The APAR has not been approved at this time. Additional delineation of soil and groundwater was requested.
 - d. Was the public involved, or can the public be involved, in the APAR approval process?
 - **TCEQ Response:** The VCP Agreement requires that the VCP Applicant maintain a website to keep the public informed of ongoing activities at the site. The TCEQ is overseeing the assessment/cleanup of this site, and will ensure that the APAR complies with TCEQ rules.
- 9. It is further identified in this March 31, 2016 document that further work is to be undertaken by the applicant after the approval of the APAR in the form of a RAP. It is

further stated in that document that the RAP will propose remedial activities for the site. What is the process of an RAP?

TCEQ Response: Once the TCEQ approves the APAR, the applicant will develop the RAP to address soil, groundwater and other environmental media impacted by COCs exceeding the TRRP Protective Concentration Levels (PCLs).

- a. Has the RAP been agreed to at this time?TCEQ Response: No, the RAP has not been submitted for TCEQ review..
- b. Will the public be involved in the design and approval of the RAP? **TCEQ Response:** The VCP Agreement requires that the VCP Applicant maintain a website to keep the public informed of ongoing activities at the site. The TCEQ is overseeing the assessment/cleanup of this site and will ensure that the RAP meets the requirements of TCEQ's rules.
- c. If so, how? If not why?
 TCEQ Response: The public can review the reports and other information submitted by the VCP Applicant.
- d. Is there any limit to the scope of remediation that may be required in the RAP? **TCEQ Response:** Remediation must ensure the protection of human health and the environment and must meet the TRRP remedy standards. This may include cleanup to permanently remove or control all soil, groundwater and other environmental media that exceed the TRRP PCLs.
- 10. From published reports, it appears that vandals turned over drums and other storage devices and spilled contaminants within the CES property. Subsequent rains caused the contaminants to run-off the property and into adjacent storm drains, watercourses and property. There does not appear to be any testing on Kuhlman Gully, an open watercourse that drains the site or other overland pathways.
 - a. Is there any plan to undertake such testing in the future? **TCEQ Response:** The TCEQ requested additional assessment of soil and groundwater in our June 24, 2016 letter. Depending on the results, this additional assessment may lead to investigation of the gully.
 - b. If so, when? See response above
 - c. If not, why not? See response above
- 11. Would EPA or TCEQ please provide some qualified toxicologist to discuss the results from the off-site testing that has been done to date?
 - TCEQ Toxicology Response: Off-site soil data collected to date do not indicate a cause for public health concern. Concentrations of soil analytes detected to date are well below levels calculated to be protective of long-term residential exposure (adults, children) considering multiple and simultaneous exposure routes (i.e., TRRP Tier 1 residential surface soil, health-based PCLs that consider daily incidental ingestion of soil, dermal contact with soil, inhalation of vapor/particulate emanating from soil, and the ingestion of homegrown produce grown in the soil). However, site delineation is not complete and future off-site sampling may be necessary, in which case staff of the TCEQ Toxicology Division will continue to be available to review the results from a health perspective.
- 12. Would EPA or TCEQ please provide some qualified toxicologist to discuss the results from on-site testing that has been done to date?
 - **TCEQ Toxicology Response:** While the results of available on-site soil testing indicate limited exceedances of TRRP residential PCLs that consider daily long-term exposure through multiple, simultaneous exposure routes, no residents live on-site, and no such exceedances have been found off-site to date. Moreover, potential exposure to impacted on-site soil (and groundwater) is limited, for example, by the existing pavement and buildings at the site as well as the fence (e.g., to help prevent trespassing).

13. Would someone with EPA or TCEQ please provide some information about the health issues associated with developing residential properties adjacent to the CES Environmental Services site?

TCEQ Toxicology Response: As mentioned above, off-site soil data to date do not indicate a cause for public health concern, and potential exposure to impacted on-site soil (and groundwater) is restricted (e.g., fencing). Thus, currently available data do not indicate any health-related concerns associated with development of residential properties adjacent to the site. However, as indicated above, the assessment is not complete at this time.

- 14. Would you please provide a list of all identified PRPs at the site?
 - a. Have all of these parties been contacted by either EPA and/or TCEQ? TCEQ Response: The VCP does not conduct a PRP search, but rather depends on a VCP Applicant to come forward and sign an Agreement to assess and remediate a site in accordance with TCEQ rules.
 - b. Is Lubrizol the only PRP that is funding the clean-up? EPA Response: Lubrizol Corporation set up the CES Griggs Road PRP Group and prepared the VCP Application. I am not sure what the current makeup of the PRP Group and other entities that may be funding the assessment and cleanup activities.
 - c. Has a meeting been held by EPA and/or TCEQ with any of the other PRPs besides Lubrizol?

EPA Response: A meeting was held by TCEQ in Austin in October 2014 with representatives of entities that had shipped waste to CES Environmental Services. After the TCEQ/EPA presentation, Lubrizol stepped forward to organize a PRP Group.

d. Who is the best contact for Lubrizol?

EPA Response:

Tony Saturni

Corporate Environmental Remediation and Liability Manager

The Lubrizol Corporation

29400 Lakeland Boulevard

Wickliffe, Ohio 44092

(440) 347-4570 (office)

(440) 347-4790 (fax)

tony.satum.i@lubrizol.com

e. Is there anyone monitoring the website for the CES Environmental Services site? Efforts to communicate to the listed email have led to no response.

EPA Response: It is my understanding that this site is actively monitored and updated by contractors for the CES Griggs Road PRP Group.

TCEQ Response: The VCP Agreement requires the PRP Group to maintain the website to keep the public informed of ongoing activities at the site.